

REUNITING THE SOLAR SYSTEM: INTEGRATED EDUCATION AND PUBLIC OUTREACH PROJECTS FOR SOLAR SYSTEM EXPLORATION MISSIONS AND PROGRAMS. Leslie Lowes¹, Marilyn Lindstrom², Stephanie Stockman³, Daniela Scalice⁴, and Sheri Klug⁵, ¹NASA Jet Propulsion Lab (Pasadena CA) ²NASA Johnson Space Center (Houston TX) & Headquarters (DC) ³SSAI NASA Goddard Space Flight Center, (Greenbelt, MD) ⁴NASA Ames Research Center (Moffett Field, CA) ⁵Arizona State University (Tempe, AZ).

Introduction: The Solar System Exploration Education Forum has worked for five years to foster Education and Public Outreach (E/PO) cooperation among missions and programs in order to leverage resources and better meet the needs of educators and the public. These efforts are coming together in a number of programs and products and in “2004 - The Year of the Solar System.”

NASA’s practice of having independent E/PO programs for each mission and its public affairs emphasis on uniqueness has led to a public perception of a fragmented solar system exploration program. By working to integrate solar system E/PO, the breadth and depth of the solar system exploration program is revealed. When emphasis is put on what missions have in common, as well as their differences, each mission is seen in the context of the whole program.

Forum Interactions: The forum coordinates E/PO for missions and programs through monthly telecons and yearly conferences. Over time, these meetings have gone from getting familiar with each other, to joint strategic planning, to forming working groups and taking action.

The forum operates on the principle of inclusion rather than exclusion. Participation by missions run from outside JPL was strongly encouraged; NEAR, CONTOUR, and MESSENGER joined. Research programs were invited; Astromaterials has been involved since the beginning. Missions and programs from other themes were welcomed; The Genesis mission brought the Sun back into the solar system and the NASA Astrobiology Institute brought it life and other solar systems. Even the Earth, which NASA separates as its own enterprise, becomes once more a part of the solar system in presenting mission results as comparative planetology. Naturally integrated science content is more important in E/PO than NASA’s artificial divisions.

Integrated Programs: The following programs and products represent integrated solar system E/PO activities. The first three programs were networks developed by JPL missions before the forum began its work. The remaining five were fostered by the forum and developed by working groups made up of members from various missions and programs.

Space Place, Nancy Leon lead: web site and support for a national network of museums, libraries, community and youth organizations.

Solar System Ambassadors, Kay Ferrari lead: training and support for a national network of speakers who present to the public on NASA missions.

Solar System Educators, Eric Brunsell lead: training and support for a national network of educators who use NASA educational activities and train other teachers.

Girl Scouts USA Partnership, Rosalie Bettrue and Jaclyn Allen leads: national program to train regional trainers of local leaders.

Solar System Nights, Sheri Klug and Art Hammon leads: kits containing mission information, activities, posters, and a how-to guide for organizing rural family science nights.

Solar System Exploration Standards Quilt, Art Hammon and Becky Knudsen leads: electronic compilation of classroom activities sorted by grade level, science content, and teaching standards.

Solar System Exploration Science Framework, Stephanie Stockman and Marilyn Lindstrom leads: mapping of the solar system exploration science goals and objectives onto the *2061 Atlas of Science Literacy*.

2004 The Year of the Solar System, Marilyn Lindstrom and Anita Sohus leads: workshops and material for both formal and informal educators that focus on the exciting series of solar system events from twelve missions.

Conclusion: The Solar System Exploration Forum and its missions and programs are preparing for the excitement of the “Year of the Solar System”. Each mission will be highlighted in turn during launches, encounters, and finales. Our science content and education framework will be integrated for easy access. But our missions will retain their scientific and E/PO identities and creativity and innovation will continue to be encouraged.

Acknowledgements. This integration would not be possible without the efforts of the forum staff, the above project leads, and all of the mission and program E/PO leads.